UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,189	12/30/2003	Bran Ferren	APPL0031	9149

22862 7590 06/25/2010

GLENN PATENT GROUP
3475 EDISON WAY, SUITE L
MENLO PARK, CA 94025

EXAMINER	
BROADHEAD, BRIAN J	

ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
06/25/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eptomatters@glenn-law.com

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/750,189
Filing Date: December 30, 2003
Appellant(s): FERREN ET AL.

Michael A. Glenn
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 11, 2008 appealing from the Office action mailed February 22, 2007.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1,3-6,8,14-16, and 18 are rejected.

Claims 2, 7, 9,-13, and 17 are cancelled.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

NEW GROUND(S) OF REJECTION

Claim(s) 6, 8, 14, 15, 16, and 18 is/are rejected under 35 USC § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim(s) recites/recite the following means (or step) plus function limitation:

As per claims **6**, claim element "means for recognizing said module's personality".

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus

function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function:

On page 4, lines 8-10.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the function as "[t]he module may also have a pre-loaded personality, for

example so that the control system recognizes it as a power module." No structure for recognizing the personality is described.

As per claim **8**, claim element "means for controlling vehicle operation and configuration."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the

general purpose computer. *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 5, lines 16-25, and page 9, lines 12-22.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the system would recognize that excessive power was required and would protect itself against damage or unsafe operation that may result from drawing more current than is available"; "[t]he installed modules also auto configure. The central processor recognizes these modules by such unique characteristics as a serial number, a bar code, and/or a configuration of mechanical pins at the point of engagement. Files inside the module may inform the central processor of attributes of the module, such as weight, size, power requirements, and capabilities. A history of the module may also be provided, including information such as past problems and total operating time"; "the central computer displays to the operator interfaces and controls appropriate for operation of the installed module, and relays commands received through the interface and controls to the equipment within the module. In this scheme, the central computer

contains software appropriate for operation of each module that may potentially be installed"; and "each module is equipped with a dedicated microprocessor for control of equipment within the module. Upon installation, each module identifies itself. During operation, the computer onboard the module sends information to the central computer indicating a set of operator interfaces and controls appropriate for operation of the module. The central computer need only coordinate the display of the control interfaces for the several installed modules". No structure for controlling vehicle operation and configuration is described.

As per claim **14**, claim element "means for acknowledging any said module, and for performing a background calculation for any of said module weight, balance, and power consumption."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and

distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 11, lines 11-18.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the function and provides examples of inputs and outputs as "[t]he computer within the vehicle acknowledges the module and performs a background calculation for weight, balance, and power consumption, for example. In the case of power consumption, the vehicle might recognize that putting two lighting modules on the vehicle exceeds the rating of the generator that comes with the vehicle. This may alert

the operator as to the need for sharing this load between the two lighting modules, or ask the operator to determine how much power goes to each module so that the available power may be used in the most effective way. In any event, the system would recognize that excessive power was required and would protect itself against damage or unsafe operation that may result from drawing more current than is available." No structure for acknowledging any said module, and for performing a background calculation for any of said module weight, balance, and power consumption is described.

As per claim **15** and dependent claim **16**, claim element " means for accepting at least two special purpose, self-identifying modules simultaneously on said vehicle platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application"

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an

adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 6, lines 6-19.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the invention provides at least the following unique elements that address the problems attendant with the prior art: 1. Assembling a set of special purpose modules onto a vehicle bed in a mix and match fashion so that the vehicle is readily provided with the functionality

desired for particular applications; 2. A plurality of specialized self-identifying modules that report to a central control system within the vehicle such parameters as weight, power consumption, size, and functionality, so that the modular elements fit within the design limits of the platform, and such that the user interface, i.e. the driver and other operator controls, are dynamically configured to express the functionality of the modules installed on the platform;" No structure for accepting at least two special purpose, self-identifying modules simultaneously on said vehicle platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application is described.

As per claim **18**, claim element "means for any of assessing any of said module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically configuring a user interface to express functionality of each of said modules installed on said platform."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate

disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 6, lines 6-19.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the invention provides at least the following unique elements that address the problems attendant with the prior art: 1. Assembling a set of special purpose modules onto a vehicle bed in

a mix and match fashion so that the vehicle is readily provided with the functionality desired for particular applications; 2. A plurality of specialized self-identifying modules that report to a central control system within the vehicle such parameters as weight, power consumption, size, and functionality, so that the modular elements fit within the design limits of the platform, and such that the user interface, i.e. the driver and other operator controls, are dynamically configured to express the functionality of the modules installed on the platform simultaneously on said vehicle platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application is described." No structure for accepting at least two special purpose, self-identifying modules No structure for any of assessing any of said module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically configuring a user interface to express functionality of each of said modules installed on said platform is described.

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,421,593	Kempen et al.	7-2002
6,547,506	Jacob	4-2003
5,785,372	Glatzmeier et al.	7-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-6, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kempen et al., 6421593, in view of Jacob, 6547506.

As per claim 1, Kempen et al. al disclose a standardized vehicle platform (1417); a plurality of fixation sites along said platform (1681, 1682), said fixation sites comprising standardized interconnection means for any of mechanical, electrical, and fluid interconnection with any one or more of a plurality of specialized functional modules that are readily attached to said standardized platform via said interconnection means, said fixation sites being located along said vehicle platform at standardized intervals to accept one or more of said modules on lines 2-15, on column 29; and a computer implemented control and communications protocol communicatively provided throughout said platform for recognizing any of a module's presence, identity, capability, and function, and for configuring said vehicle accordingly on lines 15-38, on column 29. Kempen et al. do not disclose said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time; at least two modules, each module providing a unique function, each module comprising a standardized fraction of the total area of the platforms, said

modules when affixed to said platform comprising in combination a vehicle suited for a particular use, said modules having fixation means that are located along said modules at intervals that coincide with at least a portion of the fixation sites of said platform. Jacob teaches said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time in figures 3 and 4, and lines 33-37, on column 3; at least two modules, each module providing a unique function, each module comprising a standardized fraction of the total area of the platforms, said modules when affixed to said platform comprising in combination a vehicle suited for a particular use, said modules having fixation means that are located along said modules at intervals that coincide with at least a portion of the fixation sites of said platform in figures 3 and 4 and items 110, 50, 74, and 76. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smaller and plural modules of Jacob because such modification would allow municipalities to make better use of their investment in the multi-task truck. Or in other words, the invention would reduce costs by re-using one chassis to do several different tasks which would reduce capital costs for the municipalities or customers.

As per claims 3, 4, and 5, Kempen et al. al disclose a dedicated path about said platform for effecting individual module control (1460); a computer implemented vehicle operating system for controlling said modules (1511); a plurality of custom interfaces

(31,32,33) for any of contact closures, lighting, power, control, and interface to computers on board one or more of said modules.

As per claim 6, Kempen et al. disclose means for recognizing said modules personality on lines 15-38, on column 29.

As per claims 8, and 14, Kempen et al. disclose means for controlling vehicle operation and configuration, both in accordance with a current vehicle complement of said modules and in accordance with vehicle resources and performance specifications on lines 26-37, on column 16; and means for acknowledging each module, and for performing a background calculation for any of module weight, balance, and power consumption on lines 14-38, on column 29.

Claims 15,16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kempen et al., 6421593, in view of Glatzmeier et al., 5785372.

As per claims 15, and 16, Kempen et al. al disclose a standardized vehicle platform (1417); a plurality of fixation sites along said platform (1681, 1682), said fixation sites comprising standardized interconnection means for any of mechanical, electrical, and fluid interconnection with any one or more of a plurality of specialized functional modules that are readily attached to said standardized platform via said interconnection means, said fixation sites being located along said vehicle platform at standardized intervals to accept one or more of said modules on lines 2-15, on column 29; and a computer implemented control and communications protocol communicatively provided throughout said platform for recognizing any of a module's presence, identity, capability, and function, and for configuring said vehicle accordingly on lines 15-38, on

column 29. Kempen et al. do not disclose said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time. Glatzmeier et al. teach said fixation sites defining fractional locations along an overall platform extent, wherein said platform receives a plurality of said modules, wherein said modules have an extent that is equal to, or that is a fraction of, said platform extent, and wherein any number of modules having a total, combined extent that is less than or equal to the extent of said platform may be attached to said platform at any given time in figures 1 and 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smaller and plural modules of Glatzmeier et al. because such modification would provide rapid and free assembly of variously fitted equipment cabs...due to rapidly-changing conditions of use, as stated on lines 20-28, on column 1, of Glatzmeier et al.

As per claims 18, Kempen et al. disclose means for any of assessing any of module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically configuring a user interface to express functionality of each of said modules installed on said platform on lines 15-38, on column 29.

Claim(s) 6, 8, 14, 15, 16, and 18 is/are rejected under 35 USC § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. The claim(s) recites/recite the following means (or step) plus function limitation:

As per claims 6, claim element "means for recognizing said module's personality".

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the

general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function:

On page 4, lines 8-10.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the function as "[t]he module may also have a pre-loaded personality, for example so that the control system recognizes it as a power module." No structure for recognizing the personality is described.

As per claim 8, claim element "means for controlling vehicle operation and configuration."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts

described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 5, lines 16-25, and page 9, lines 12-22.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the system

would recognize that excessive power was required and would protect itself against damage or unsafe operation that may result from drawing more current than is available"; "[t]he installed modules also auto configure. The central processor recognizes these modules by such unique characteristics as a serial number, a bar code, and/or a configuration of mechanical pins at the point of engagement. Files inside the module may inform the central processor of attributes of the module, such as weight, size, power requirements, and capabilities. A history of the module may also be provided, including information such as past problems and total operating time"; "the central computer displays to the operator interfaces and controls appropriate for operation of the installed module, and relays commands received through the interface and controls to the equipment within the module. In this scheme, the central computer contains software appropriate for operation of each module that may potentially be installed"; and "each module is equipped with a dedicated microprocessor for control of equipment within the module. Upon installation, each module identifies itself. During operation, the computer onboard the module sends information to the central computer indicating a set of operator interfaces and controls appropriate for operation of the module. The central computer need only coordinate the display of the control interfaces for the several installed modules". No structure for controlling vehicle operation and configuration is described.

As per claim 14, claim element "means for acknowledging any said module, and for performing a background calculation for any of said module weight, balance, and power consumption."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special

purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 11, lines 11-18.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the function and provides examples of inputs and outputs as "[t]he computer within the vehicle acknowledges the module and performs a background calculation for weight, balance, and power consumption, for example. In the case of power consumption, the vehicle might recognize that putting two lighting modules on the vehicle exceeds the rating of the generator that comes with the vehicle. This may alert the operator as to the need for sharing this load between the two lighting modules, or ask the operator to determine how much power goes to each module so that the available power may be used in the most effective way. In any event, the system would recognize that excessive power was required and would protect itself against damage or unsafe operation that may result from drawing more current than is available." No structure for acknowledging any said module, and for performing a background calculation for any of said module weight, balance, and power consumption is described.

As per claim 15 and dependent claim 16, claim element " means for accepting at least two special purpose, self-identifying modules simultaneously on said vehicle

platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application"

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least

disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 6, lines 6-19.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the invention provides at least the following unique elements that address the problems attendant with the prior art: 1. Assembling a set of special purpose modules onto a vehicle bed in a mix and match fashion so that the vehicle is readily provided with the functionality desired for particular applications; 2. A plurality of specialized self-identifying modules that report to a central control system within the vehicle such parameters as weight, power consumption, size, and functionality, so that the modular elements fit within the design limits of the platform, and such that the user interface, i.e. the driver and other operator controls, are dynamically configured to express the functionality of the modules installed on the platform;" No structure for accepting at least two special purpose, self-identifying modules simultaneously on said vehicle platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application is described.

As per claim 18, claim element "means for any of assessing any of said module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically configuring a user interface to express functionality of each of said modules installed on said platform."

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or "step for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the

general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function: On page 6, lines 6-19.

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. The Specification simply repeats the functions and provides examples of inputs and outputs as "the invention provides at least the following unique elements that address the problems attendant with the prior art: 1. Assembling a set of special purpose modules onto a vehicle bed in a mix and match fashion so that the vehicle is readily provided with the functionality desired for particular applications; 2. A plurality of specialized self-identifying modules that report to a central control system within the vehicle such parameters as weight, power consumption, size, and functionality, so that the modular elements fit within the design limits of the platform, and such that the user interface, i.e. the driver and other operator controls, are dynamically configured to express the functionality of the modules installed on the platform simultaneously on said vehicle platform in a mix and match fashion to provide said vehicle with a desired functionality for a particular application is described." No structure for accepting at least two special purpose, self-identifying

modules No structure for any of assessing any of said module weight, power consumption, size, and functionality; determining whether a complement of modules fit within design limits of said platform; and dynamically configuring a user interface to express functionality of each of said modules installed on said platform is described.

(10) Response to Argument

Claims 1, 3-6, 8, and 14

Appellant's arguments begin on page 14 of the brief by arguing in the second paragraph that somehow Kempen's variant module cannot be considered the same as the module of the current invention. Appellant seems to be stating that the only comparable modules are the interface modules of Kempen. Applicant finishes the argument by stating "a person of ordinary skill in the art would recognize the challenges associated with creating a common chassis and control system to support the distinct differences between the functions of these types of vehicles." It is not really clear what point Appellant is trying to make. Kempen discloses a vehicle that can be changed by placing various variant modules on a chassis so the vehicle can perform different functions. Kempen clearly refers to these variant modules as modules. Since the modules can be exchanged with each other is very hard to understand how Appellant is arguing that Kempen lacks the modularity of the current invention. Appellant may want to interpret the Kempen reference differently, but the interpretation currently used in the rejection is proper and Appellant has failed to show how the variant modules of Kempen aren't modules that provide modularity.

The arguments continue on page 15 of the brief with the Appellant attacking the references individually instead of what the combination teaches. While Kempen only teaches using one variant modules at a time, the secondary reference is cited for teaching multiple modules.

Appellant also argues that the fixation sites in the current invention are different than what is cited in the reference. Again, in attacking the references individually, Appellant misses what the combination of references teaches. Kempen does teach multiple attachment points, but these attachment points are not for multiple modules. The secondary reference of Jacob is cited for teaching the multiple attachment points for multiple modules. In the second paragraph of page 16 of the brief Appellant also mischaracterizes what is claimed. Appellant makes the argument that individual mechanical, fluid, and electrical connectors are needed for each module. However, in reading claim one, the language used is "interconnection means for any of mechanical, electrical, and fluid connection." This language does not require all of those types, just any one of the three.

In addressing the secondary reference of Jacob Appellant has not recognized the full teachings of Jacobs. Appellant argues that only the bins of Jacob are modules and ignores the other teachings that were noted in the remarks of the Advisory action of 6-20-07. As noted then, Jacobs also disclosed that the modules can include vacuum pump (74), vacuum tank (76), and backhoe (110). Jacobs also teaches that these components can also be individually attached at their own attachment points on lines 32-37, on column 3. Appellant again argues that the "bins" don't have fluid or electrical

connections even though that is not required by the claims. Even if it were required, Kempen's much more complex modules provided for these other connections.

Finally, Appellant argues that there is not motivation to combine the two references. This is not convincing because Jacobs teaches of the desirability of being able to use one truck for multiple functions and would allow municipalities or others to make better use of the investments. Kempen already discloses the benefits of modularity. Taking it one step further by using more modularity is clearly within the ordinary skill in the art and has no unexpected results. The idea of modularity in vehicles has been around for ages. One simply has to look at the standard pallet size used in tractor trailers as an example, or the various tool box attachments available for pickup trucks.

Claims 15, 16, and 18

In arguing the rejection of claims 15, 16, and 18 Appellant relies on the arguments presented for the first rejection and those arguments are not convincing for the reasons set forth above. The arguments with respect to the secondary of Glatzmeier are not convincing because Appellant has not acknowledged how the reference has been applied. Glatzmeier is cited for providing a box structure that is cited for showing the attachment points, not the modules themselves as Appellant has set forth. Again, as noted in the advisory action mailed 6-20-07, it is pointed out that the box structure is the fixation sites and the modules are the generator unit (49) or other equipment mentioned on lines 62-67, on column 8. These modules are removable and

replaceable depending on the vehicle's purpose. Again, Glatzmeier is not cited for teaching the fluid and electrical connections because these are provided by Kempen.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section **(9)** above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR

41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Brian Broadhead/B. J. B./

Examiner, Art Unit 3664

/KHOI TRAN/

Supervisory Patent Examiner, Art Unit 3664

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

/Katherine Matecki/

Director, Technology Center 3600

Conferees:

Khoi Tran /KT/

Marc Jimenez /MJ/ TQAS TC 3600